

What is claimed is:

1. A molding made of plastic and having a material thickness of at least 150 μm , comprising a polymer mixture composed of an impact-modified poly(meth)acrylate polymer, of a poly(meth)acrylate matrix and elastomer particles distributed therein, and a fluoropolymer, the proportion of the fluoropolymer in the mixture being from 30 to 95% by weight, and the polymer mixture composed of the impact-modified poly(meth)acrylate polymer and the fluoropolymer being present in an outer layer with a continuous material thickness of at least 10 μm , characterized in that
- 15 the impact-modified poly(meth)acrylate polymer consists of from 20 to 70% by weight of a poly(meth)acrylate matrix and from 80 to 30% by weight of elastomer particles.
- 20 2. The molding as claimed in claim 1, characterized in that the elastomer particles have a core with a soft elastomer phase and a hard phase bonded thereto.
- 25 3. The molding as claimed in claim 1 or 2, characterized in that the mean particle diameter of the elastomer particles is from 10 to 1000 nm.
- 30 4. The molding as claimed in claim 1, 2 or 3, characterized in that it consists entirely of the polymer mixture composed of the impact-modified poly(meth)acrylate polymer and the fluoropolymer.
- 35 5. The molding or film as claimed in claim 4, characterized in that the material thickness is from 150 to 10 000 μm .
6. The molding or film as claimed in claim 5,

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characterized in that the elongation at break after storage at 60°C for 10 days is at least 150%.

7. The molding or film as claimed in claim 5,
5 characterized in that the elongation at break after storage at 60°C for 10 days is still at least 60% of the value without 10-day thermal stress.

8. The molding or film as claimed in one or more of
10 claims 5 to 7, characterized in that the film is present within a membrane structure, the membrane structure comprising at least two curved films welded to one another at the edges and enclosing a cavity.

15 9. A process for producing a molding or a film as claimed in one or more of claims 5 to 8 in a manner known per se by means of thermoplastic processing, especially extrusion or injection molding, or by means of solvent casting.

20 10. The use of a molding or of a film as claimed in one or more of claims 5 to 8 as a roofing element, façade element, as a window in a folding roof for a vehicle with foldable soft top.

25 11. The molding as claimed in claim 1, 2 or 3, characterized in that it is a composite molding which, in addition to the layer comprising the polymer mixture composed of the impact-modified poly(meth)acrylate polymer and the fluoropolymer, comprises a further thermoplastically processible polymer bonded to the polymer mixture and the layer of the polymer mixture has a continuous material thickness of from 10 to 30 150 µm.

35 12. The composite molding as claimed in claim 11, characterized in that the further polymer is a polymethyl methacrylate, impact-modified polymethyl

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- methacrylate, polycarbonate, polystyrene, acrylic ester/styrene/acrylonitrile graft copolymer (ASA), styrene-acrylonitrile (SAN), polyethylene terephthalate (PET), glycol-modified polyethylene terephthalate (PETG), polybutylene terephthalate (PBT), polyvinyl chloride (PVC), polyolefin, cycloolefin copolymer (COC), acrylonitrile-butadiene-styrene (ABS), or is a mixture (blend) of different thermoplastics.
- 10 13. The composite molding as claimed in claim 11 or 12, characterized in that it has a ratio of elongation at the start of crack formation in the layer of the polymer mixture composed of the impact-modified poly(meth)acrylate polymer and the fluoropolymer after 15 storage at 60°C for 10 days divided by the value without heat treatment of 0.5.
- 20 14. A process for producing a composite molding as claimed in one or more of claims 11 to 13 in a manner known per se by means of film lamination, coextrusion, extrusion coating, insert molding processes or solvent casting processes.
- 25 15. The use of a composite molding as claimed in one or more of claims 11 to 13 as a roofing element, façade element, parts of household appliances, communication equipment, hobby or sport equipment, chassis parts or parts of chassis parts or for parts in automobile, ship or aircraft building, for example panels, bumpers, mud 30 fenders, sun visors or trim.
- 35 16. The molding as claimed in one or more of claims 1 to 15, characterized in that from 0.01 to 10% by weight of a light stabilizer are present in the layer of the polymer mixture composed of the impact-modified poly(meth)acrylate polymer and the fluoropolymer.
17. The molding as claimed in claim 1, 2 or 3,

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characterized in that it is a composite molding which, in addition to the layer comprising the polymer mixture composed of the impact-modified poly(meth)acrylate polymer and the fluoropolymer, comprises a high-pressure laminate plate bonded to the polymer mixture and composed of high-pressure-compacted, synthetic resin-impregnated paper or a metal plate, and the layer of the polymer mixture has a continuous material thickness of from 10 to 150 µm.

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18. A process for producing a composite molding as claimed in claim 17 in a manner known per se by means of high-pressure/high-temperature pressing process or in the coil-coating process.

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19. The use of a composite molding as claimed in claim 17 as a roofing element, façade element, parts of household appliances, hobby or sport equipment, chassis parts or parts of chassis parts or for parts in 20 automobile, ship or aircraft building, for example panels, bumpers, mud fenders, sun visors or trim.